

## ⑫ 公開実用新案公報(U) 平4-32718

⑤ Int. Cl.<sup>3</sup>

識別記号

庁内整理番号

④ 公開 平成4年(1992)3月17日

A 61 F 13/15

8118-3B  
8118-3B

A 41 B 13/02

T  
G

審査請求 未請求 請求項の数 10 (全3頁)

⑥ 考案の名称 使捨ておむつ

⑦ 実 願 平2-73465

⑧ 出 願 平2(1990)7月11日

Translation Attached

⑨ 考案者 吉村 真治 神奈川県横浜市港北区新羽町1050 株式会社資生堂研究所内

⑩ 考案者 山本 陽平 神奈川県横浜市港北区新羽町1050 株式会社資生堂研究所内

⑪ 考案者 鮫島 忠典 静岡県富士市富士見台7-12-3

⑫ 考案者 佐藤 正文 静岡県富士宮市田中町1241

⑬ 出願人 株式会社資生堂 東京都中央区銀座7丁目5番5号

⑭ 出願人 本州製紙株式会社 東京都中央区銀座5丁目12番8号

⑮ 代理人 弁理士 清水 修

## ⑯ 実用新案登録請求の範囲

- (1) 液透過性の表面層と液不透過性の防漏層との間に、表面層および防漏層よりも小面積の液吸収性の吸収層を介装することにより、外周にエンドフラップおよびサイドフラップを形成した吸収体と、5本以上の弾性糸を50mm以上の幅に渡って帯部材の長さ方向に固定した連結体とから成り、この連結体を少なくともエンドフラップに接触して吸収体に固定し、この連結体を環状に連結した事の特徴とする使捨ておむつ。
- (2) 連結体は、吸収体の防漏層に固定した事の特徴とする請求項1記載の使捨ておむつ。
- (3) 連結体は、吸収体の表面層に固定した事の特徴とする請求項1記載の使捨ておむつ。
- (4) 連結体は、エ字型の接着層を介して吸収体の防漏層または表面層に固定した事の特徴とする請求項2, 3記載の使捨ておむつ。
- (5) 連結体は、ロ字型の接着層を介して吸収体の防漏層または表面層に固定した事の特徴とする請求項2, 3記載の使捨ておむつ。
- (6) 連結体は、外方の長辺をエンドフラップの外端縁よりも外方に位置して吸収体に固定した事の特徴とする請求項1記載の使捨ておむつ。
- (7) 連結体は、外方の長辺をエンドフラップの外

端縁よりも内方もしくは面一に位置して吸収体に固定した事の特徴とする請求項1記載の使捨ておむつ。

- (8) 連結体の弾性糸の伸長率は、幅方向の中程を外側よりも小さく形成した事の特徴とする請求項1記載の使捨ておむつ。

- (9) 複数の弾性糸は、平行に設けた事の特徴とする請求項1, 2, 3, 4, 5, 6記載の使捨ておむつ。

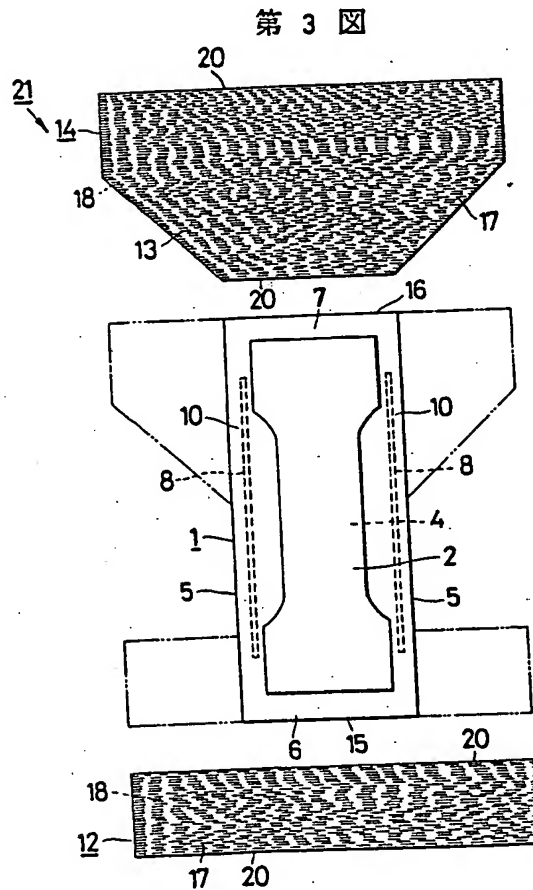
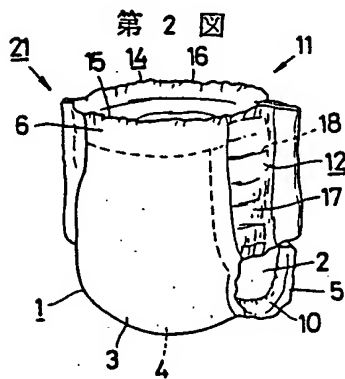
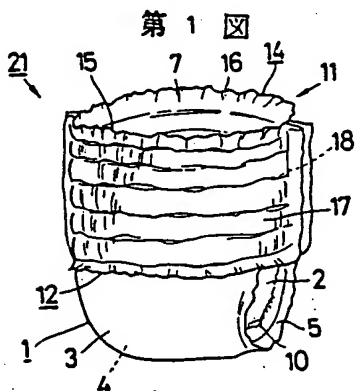
- (10) 複数の弾性糸は、互いに交差して連結体に固定する事により形成した事の特徴とする請求項1, 2, 3, 4, 5, 6記載の使捨ておむつ。

## 図面の簡単な説明

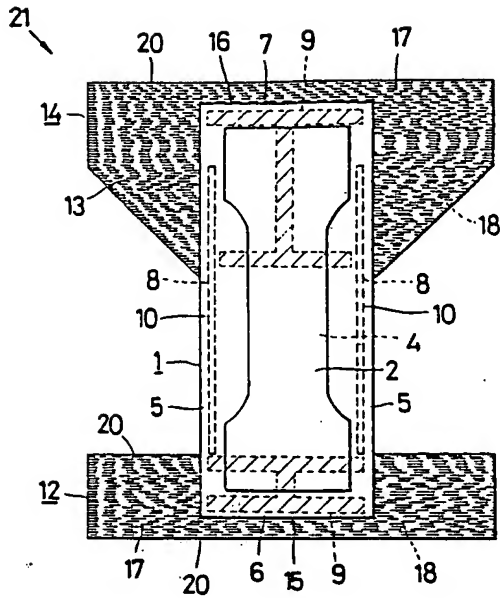
図面は本考案の実施例を示すものであつて、第1図は防漏層に連結体を固定したおむつの斜視図、第2図は表面層に連結体を固定したおむつの斜視図、第3図は連結体と吸収体の分離状態を示す平面図、第4図は連結体の外方の長辺をエンドフラップの外端縁よりも外方に位置したおむつの展開状態を示す平面図、第5図は連結体に弾性糸を部分的に介装したおむつの展開状態を示す平面図、第6図は連結体をコ字型の接着層を介して表面層側に固定した状態を示す一部平面図、第7図は第6図の斜視図、第8図は帯部材の外側縁を折

返して設けた連結体の断面図、第9図は帯部材の外側縁の一方を折返して設けた連結体の断面図、第10図は幅方向の外側の弾性系の固定間隔を小さく形成した連結体の断面図、第11図は幅方向の外側の弾性系を幅広状に形成した連結体の断面図、第12図は弾性系を交差して設けた連結体の一部切欠平面図である。

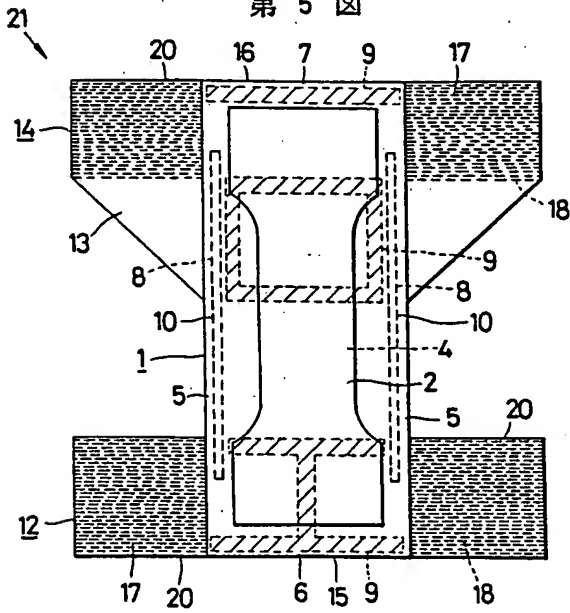
1.....吸収体、2.....表面層、3.....防漏層、4.....吸収層、5.....サイドフラップ、6.....腹側エンドフラップ、7.....背側エンドフラップ、9.....接着層、11.....連結体、15.....外端縁、16.....外端縁、17.....帯部材、18.....弾性系。



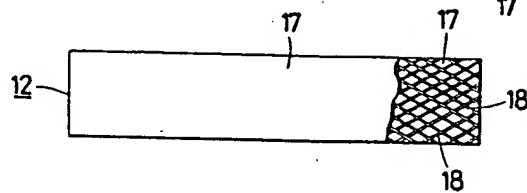
第4図



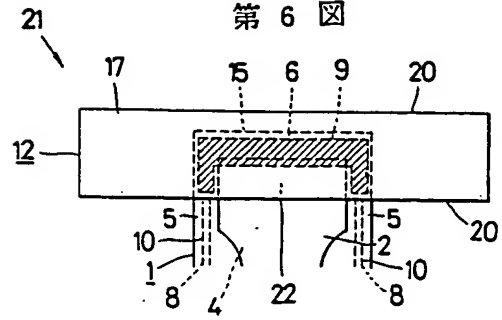
第5図



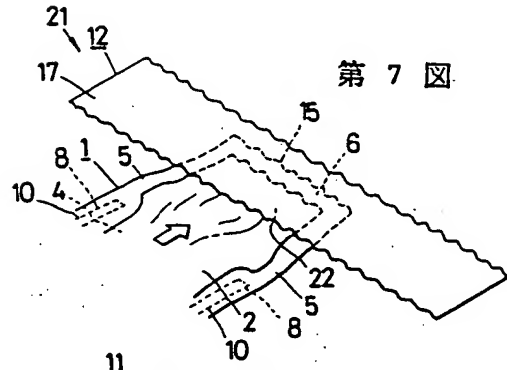
第12図



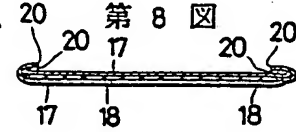
第6図



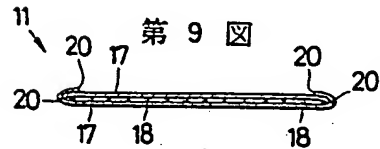
第7図



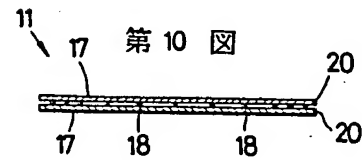
第8図



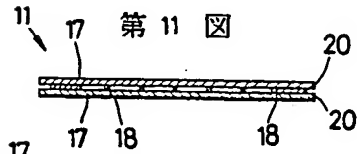
第9図



第10図



第11図



Utility Model Design Registration Application Laid Open  
H4-32718

Translation of Japanese Patent H4-32718

1

(19) JAPANESE PATENT OFFICE (JP)

(11) Utility Model Design Registration Laid Open H4-32718

(12) Utility Model Design Registration Laid Open  
Gazette (U)

(51) Int.Cl.<sup>5</sup>      Recognition Code      Office File Number  
A 61 F 13/15

8118-3B A 41 B 13/02 T

8118-3B G

(43) Published March 17, 1992

Request for Examination: Not yet requested

Number of Claims: Ten

Number of Pages in the Japanese Text: Three

(54) Title of the Invention: Disposable diapers

(21) Application Number: H2-73465

(22) Date of Application: July 11, 1990

(72) Designer: M. Yoshimura

c/o Shiseido K.K. Laboratories, 1050  
Nippacho, Minatokita-ku, Yokohama-shi,  
Kanagawa Ken, Japan

(72) Designer: Y. Yamamoto

c/o Shiseido K.K. Laboratories, 1050  
Nippacho, Minatokita-ku, Yokohama-shi,  
Kanagawa Ken, Japan

(72) Designer: T. Satoshima

7-12-3 Fujimidai, Fuji-shi, Shizuoka-ken,  
Japan

(72) Designer: M. Sato

1241 Tanakacho, Fujimiya-shi, Shizuoka-ken,  
Japan

(71) Applicant: Shiseido K.K.


5-5 Ginza-7-chome, Chuo-ku, Tokyo-to, Japan

(71) Applicant: Honshu Seishi K.K.

12-8 Ginza-5-chome, Chuo-ku, Tokyo-to, Japan

(74) Agent: Patent Attorney Osamu Shimizu

**(57) Scope of the Utility Model Design Registration  
Claims**

- (1) A disposable diaper comprising an absorbent body, which has end flaps and side flaps formed on the outer periphery by inserting between a liquid permeable surface layer and a liquid impermeable leakage-preventing layer an absorbing layer which has liquid absorbing properties and which has a smaller area than the surface layer and the leakage-preventing layer, and a connecting body which have five or more elastic threads across a width of 50 mm or more and which are fixed in the length direction of the belt material, and the connecting body is fixed to the absorbent body in contact with at least the end flaps and the connecting body is connected in the form of a ring.
- (2) The disposable diaper disclosed in claim 1 wherein the connecting body is connected to the leakage-preventing layer of the absorbent body.
- (3) The disposable diaper disclosed in claim 1 wherein the connecting body is fixed to the surface layer of the absorbent body.
- (4) The disposable diaper disclosed in claim 2 or claim 3 wherein the connecting body is fixed to the leakage-preventing layer or the surface layer of the absorbent body with a  shaped adhesive layer.
- (5) The disposable diaper disclosed in claim 2 or

claim 3 wherein the connecting body is fixed to the leakage-preventing layer or the surface layer of the absorbent body with a squared U-shaped adhesive layer.

- (6) The disposable diaper disclosed in claim 1 wherein the connecting body is fixed to the absorbent body with the long side on the outer side located on the out side beyond the outer edge of the end flap.
- (7) The disposable diaper disclosed in claim 1 wherein the connecting body is fixed to the absorbent body with the long side on the outer side located in line with or to the inside of the outer edge of the end flap.
- (8) The disposable diaper disclosed in claim 1 wherein the elasticity of the elastic threads of the connecting body is lower in the middle part of the width direction than on the outside.
- (9) The disposable diaper according to any of claims 1, 2, 3, 4, 5 and 6 wherein the plurality of elastic threads are established in parallel.
- (10) The disposable diaper according to any of claims 1, 2, 3, 4, 5 and 6 wherein the plurality of elastic threads are fixed to the connecting body crossing over one another.

#### **Brief Explanation of the Drawings**

The drawings show embodiments of the invention,



and Figure 1 is an oblique view of a diaper where the connecting body is fixed to the leakage-preventing layer, Figure 2 is an oblique view of a diaper where the connecting body is fixed to the surface layer, Figure 3 is a plan view which shows a separated form of the connecting body and the absorbent body, Figure 4 is a plan view of the opened out state of a diaper where the long side in the outer direction of the connecting body is located to the outside of the outer edge of the end flap, Figure 5 is a plan view of the opened out form of a diaper where the elastic threads are located on part of the connecting body, Figure 6 is a partial plan view of the state where the connecting body is fixed on the surface layer side with a squared U-shaped adhesive layer, Figure 7 is an oblique view of Figure 6, Figure 8 is a cross sectional view of the connecting body established with the outside edges of the belt part folded over, Figure 9 is a cross sectional view of the connecting body established with one of the outer edges of the belt part folded over, Figure 10 is a cross sectional view of the connecting body where smaller fixing gaps of the elastic threads are formed on the outside of the width direction, Figure 11 is a cross sectional view of the connecting body where wider fixing gaps of the elastic threads are formed on the outside of the width direction, and Figure 12 is a part cut-away plan view of the connecting body where the elastic threads are established crossing over one

another.

1: Absorbent body, 2: Surface layer, 3: Leakage-preventing layer, 4: Absorbent layer, 5: Side flaps, 6: Abdominal side end flap, 7: Back end flap, 9: Adhesive layer, 11: Connecting body, 15: Outer edge, 16: Outer edge, 17: Belt part, 18: Elastic threads

Figure 1

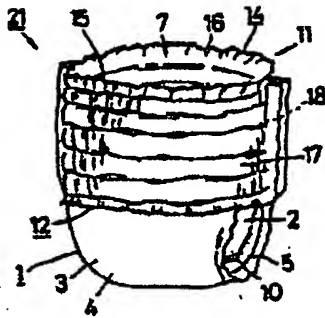


Figure 2

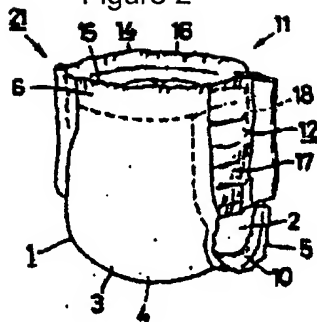


Figure 3

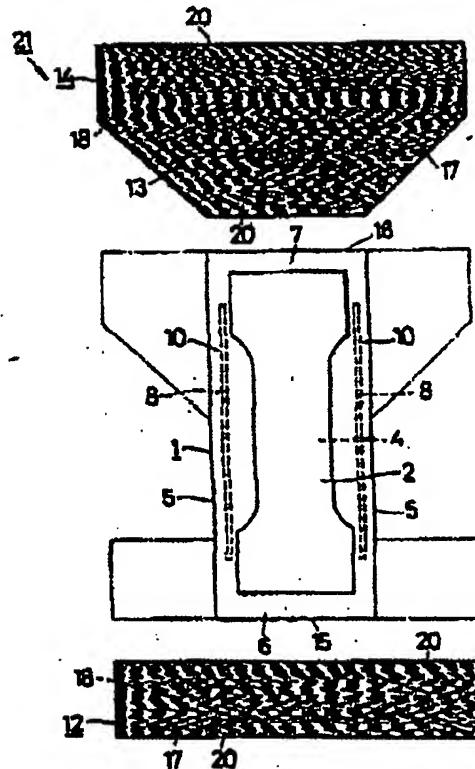


Figure 4

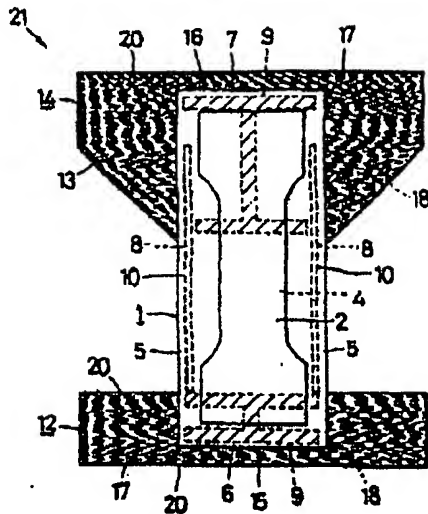


Figure 5

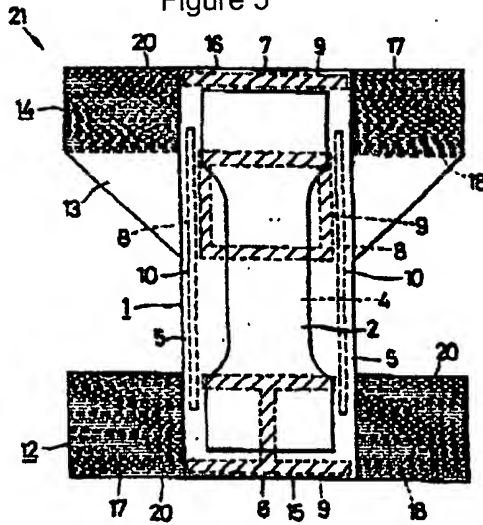


Figure 12

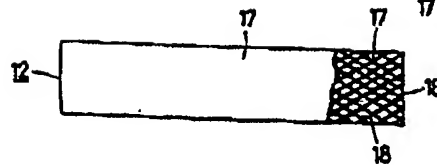


Figure 6

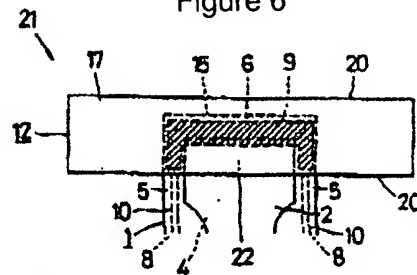


Figure 7

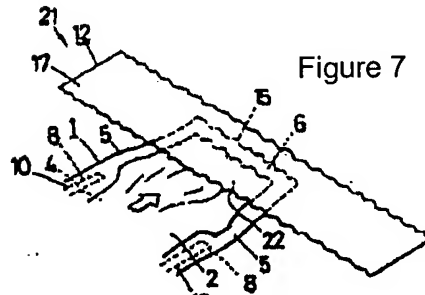


Fig. 8

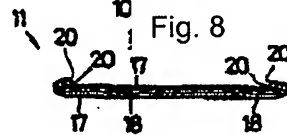


Fig. 9

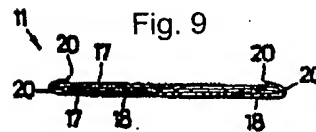


Figure 10

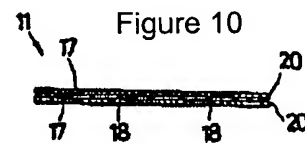


Figure 11

